

REMARKS

Claims 1-6 and 8-15 are pending. No new matter has been added by way of the present amendments. For instance, the claims have been amended to clarify that the present photothermographic material comprises at least one compound represented by formula (I) and at least one compound represented by formula (1) and (2) or (3). The compound according to formula (1) and (2) or (3) referred to as the "second" compound, must satisfy at least one of the characteristics of (i)-(iii). New claim 15 is supported by originally filed claim 1. These amendments are non-narrowing in nature. Accordingly, no new matter has been added.

Applicant further submits that no new issues have been raised by way of the present submission which require additional search and/or consideration on the part of the Examiner. In particular, the claims have simply been clarified as discussed above. The scope of the claims has not been altered therefore the Examiner is not presented with the burden of additional search and/or consideration. Thus, no new issues have been raised.

In the event that the present amendment does not place the application into condition for allowance, entry thereof is respectfully requested as placing the application into better form for appeal.

In view of the following remarks, Applicant respectfully requests that the Examiner withdraw all rejections and allow the currently pending claims.

Issues under 37 C.F.R. § 1.75(c)

At page 2 of the Office Action, the Examiner has presented an objection under 37 C.F.R. § 1.75(c). Applicant has clarified with the Examiner that it is claims 11-14 which are being objected to under 37 C.F.R. § 1.75(c). Applicant traverses and submits that the claims have been clarified such that these claims are not duplicative. Reconsideration and withdrawal of this objection are respectfully solicited.

Issues under 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claims 1-14 under 35 U.S.C. § 112, second paragraph, for the reasons recited at page 2 of the outstanding Office Action. Applicant respectfully traverses this rejection.

The Examiner has rejected the use of the term "compounds" or "compound" associated with items (i), (ii) and (iii). Applicant has amended the claims to clarify this issue. In particular, the claims have been amended to clarify that photothermographic material comprises at least one compound represented by formula (I) and at least one compound represented by formula (1) and (2) or (3).

Further, the compound according to formula (1) and (2) or (3) referred to as the "second" compound, must satisfy at least one of the characteristics of (i)-(iii). Therefore, items (i), (ii), and (iii) are simply characteristics of a compound, and not a compound *per se*. Accordingly, this rejection is moot. Reconsideration and withdrawal thereof are respectfully requested.

Issues under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-14 under 35 U.S.C. § 103(a) as being obvious over Ito et al., USP 6,150,084 (hereinafter referred to as Ito '084) in view of JP 11-149136 (hereinafter referred to as JP '136) and Adin et al. (hereinafter referred to as Adin). Applicant respectfully traverses this rejection.

The present invention relates to a photothermographic material comprising a non-photosensitive silver salt of an organic acid, a photosensitive silver halide, a reducing agent for silver ions and a binder on one surface of a support. The invention is characterized by utilizing both a compound encompassed by formula (I) and a second compound having a formula of (1), (2) or (3). The second compound satisfies at least one of characteristics (i) to (iii).

In the outstanding Office Action, the Examiner has admitted that Ito '084 discloses the second compound of the present invention but fails to suggest or disclose a compound of formula

(I). Further, JP '136 and Adin disclose a compound encompassed by formula (I) but fail to suggest or disclose the second compound of the present invention. Accordingly, the Examiner alleges that it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound taught in JP '136 or the compound taught in Adin to provide a photothermographic material having properties such as being high in Dmax and sensitivity and enhanced in contrast.

First, Applicant submits that the Examiner's rejection amounts to hindsight reconstruction. There exists no motivation to select specific elements from each of the respective references to pursue the presently claimed subject matter. At the very most, the Examiner's rejection amounts to an "obvious to try" standard, which is improper in the presentation of a *prima facie* case of obviousness. "Obvious to try" is not a valid test of patentability. In re Mercier, 185 USPQ 774 (CCPA 1975); see also Hybritech Inc. v. Monoclonal Antibodies, 231 USPQ 81 (Fed. Cir. 1986). Thus, there exists no *prima facie* case of obviousness.

Second, Applicant submits that the superior properties achieved by the presently claimed subject matter compared to the cited art are unexpected. The Examiner has asserted that it would have been obvious to use the compound taught in JP '136 or the compound taught in Adin to provide a photothermographic material meeting various properties such as being high in Dmax and

sensitivity, and being enhanced in contrast. However, the photothermographic material of the claimed invention is characterized by exhibiting low D_{min} , high D_{max} , improved sensitivity, high contrast and low fog after leaving. These superior properties are unexpected.

According to the present invention, the combined use of a compound of formula (I) and a second compound (Formula (1), (2), or (3)) enables improvement of all of the above-cited properties. This was illustrated in the previously submitted Declaration under 37 C.F.R. § 1.132 executed by Tetsuo Yamaguchi dated July 8, 2004 (submitted on July 12, 2004).

A review of the Declaration reveals the following:

1. A comparison of A-2 and A-3 with A-1 indicates that the use of the compound of formula (I) improves sensitivity by 0.05 (from 0.70 to 0.75) and the use of the second compound improves D_{max} by 2.0 (from 1.7 to 3.7), sensitivity by 0.30 (from 0.70 to 1.00) and γ (gamma) by 12 (from 2 to 14) but deteriorates fog after leaving by 0.05 (from 0.17 to 0.22).

2. A comparison of A-4 with A-1 indicates that the use of the compound of formula (I) and the second compound in combination improves D_{max} by 2.1 (from 1.7 to 3.8), sensitivity by 0.55 (from 0.70 to 1.25) and γ (gamma) by 13 (from 2 to 15) without substantial change of fog after leaving (from 0.17 to 0.16).

Applicant respectfully submits that it is unexpected that the combined use of a compound of formula (I) and the second compound of the present invention synergistically improves sensitivity and effectively inhibits fog after leaving while achieving low Dmin, high Dmax and high γ (gamma). These unexpected results are also supported by the groups of:

- (1) A-1, A-2, A-5 and A-6;
- (2) A-1, A-2, A-7 and A-8; and
- (3) A-1, A-2, A-9 and A-10.

Ito '084, JP '136 and Adin fail to suggest or disclose a photothermographic material that exhibits the combined superior results of low Dmin, high Dmax, improved sensitivity, high contrast and low fog after leaving. In particular, none of the references cited by the Examiner suggest the improvement of fog after leaving. Accordingly, Applicant respectfully submits that those of skill in the art could not have reasonably expected that the invention as recited in the claims would exhibit improved fog after leaving, in addition to the other superior properties, before the claimed invention was made.

Further, none of the cited references suggest the synergistic effect of the claimed combination. Thus, those of skill in the art could not have reasonably expected that the claimed combination would improve sensitivity synergistically without adversely affecting the other four discussed properties.

Accordingly, in view of the above, Applicant respectfully submits that even if the Examiner has hypothetically presented a *prima facie* case of obviousness, a point not conceded, the presently claimed invention achieves unexpectedly superior results compared to the cited art. Thus, any hypothetical *prima facie* case of obviousness is moot.

Further, at item 8 of the outstanding Office Action, the Examiner alleges that the Declaration fails to show results of the lower and upper limit of the claimed range and values outside the claimed range. Thus, the Examiner alleges that the criticality of the claimed range cannot be determined. The Examiner also concludes that the Declaration is not commensurate with the scope of the claimed invention. Applicant respectfully disagrees.

In the Declaration, Mr. Yamaguchi uses Compound 95 of JP '136 (encompassed by claimed formula (I)), and C-1, C-8, C-42 and C-57 of Ito '084 (having formula satisfying the second compound, and having characteristics satisfying at least one of (i) to (iii)). Samples A-4, A-6, A-8 and A-10 satisfy all the claimed conditions. C-1, C-8, C-42 and C-57 of Ito '084 have a developed silver grain density of 1300-1400 and a covering power of 220-230, which are typical examples of the claimed second compound.

Importantly, Applicant submits that the criticality of the claimed ranges need not be entirely illustrated. To rebut a hypothetical *prima facie* case of obviousness, it is only necessary

to show unexpectedly superior results of the claimed invention with respect to the closest exemplified prior art. Ito '084 discloses typical examples of the claimed second compound of the present invention, and the Declaration uses these examples for comparison.

In summary, Applicant respectfully submits that the Declaration is fully commensurate with the scope of the claimed invention and the comparative tests were reasonably conducted to support the arguments made against the obviousness rejection. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection and allow the currently pending claims.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of \$1020.00 is being filed concurrently with the filing of a Notice of Appeal.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Craig A. McRobbie (Reg. No. 42,874) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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(Rev. 02/12/2004)